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REMARKS

The foregoing amendments and the following remarks are responsive to the September 30, 2004 Office Action. Claims 1, 2, 6, 11, 12, 16-18, 28, 32, and 35 remain as previously presented, Claims 3-5 and 19 remain as originally filed, Claims 20-27 are cancelled without prejudice, Claims 10, 29, 30, 31, 33, and 34 are amended, and Claims 7-9 and 13-15 are withdrawn by the Examiner. Thus, Claims 1-19, 28-30, and 31-35 are presented for further consideration. Please enter the amendments and reconsider the claims in view of the following remarks.

Summary of Personal Interview on January 25, 2005

Applicant thanks Examiner Cheryl Miller and Primary Examiner Bruce Snow for extending the courtesy of conducting a personal interview with Applicant's representatives, Mark Kertz (Applicant's attorney) and Scott Evans on January 25, 2005. During the interview, various proposed amendments to Claim 29 and the other independent claims were discussed to overcome the cited references of the September 30, 2004 Office Action. Applicant's attorney noted that an official amendment would be drafted and submitted for review.

Comments Regarding the Attorney of Record

The September 30, 2004 Office Action was not mailed to the attorney of record. A "Revocation and Appointment of Attorney" was mailed to the U.S.P.T.O. on December 18, 2002, and was received by the U.S.P.T.O. on December 24, 2002, as evidenced by the return postcard. Pursuant to the "Revocation and Appointment of Attorney," the correct attorneys of record are the registrants of:

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Copies of the "Revocation and Appointment" and the return postcard are provided herewith. Applicant respectfully requests that the correct attorneys of record be noted in the record of the present application.

Comments on Election/Restriction Requirement of June 24, 2004

In the Election/Restriction Requirement of June 24, 2004, the Examiner stated that the present application contains claims directed to 5 patentably distinct species of the claimed

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invention and 5 subspecies. The Examiner required election of a single disclosed species and subspecies for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

In the "Response to the Election/Restriction Requirement of June 24, 2004," Applicant elected without traverse to prosecute Claims 1-6, 10-12, 16-19, and 28-35, i.e., the claims directed to Species 1 (corresponding to Figures 1-13) and Subspecies 1 (corresponding to Figure 13). Applicant also identified Claims 1-6, 16-18, 28-32, and 34-35 as being generic to all the species and subspecies identified by the Examiner.

In the September 30, 2004 Office Action, the Examiner indicates that Claims 7-9 and 13-15 are withdrawn from consideration, presumably acknowledging Applicant's election without traverse. Applicant respectfully requests that the Examiner consider the patentability of Claims 7-9 and 13-15 upon the allowance of a generic claim.

Response to Examiner's Comments on the Abstract

In the September 30, 2004 Office Action, the Examiner states that the abstract should not exceed 150 words and should avoid the form and legal phraseology often used in patent claims.

As described herein, Applicant has amended the abstract accordingly.

Response to Objection of the Drawings

In the September 30, 2004 Office Action, the Examiner objects to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(4) and (p)(5). As described herein, Applicant has either amended the specification or the drawings to address the issues identified by the Examiner. The amended drawings are submitted herewith as replacement sheets which are labeled "Replacement Sheet Reply to Office Action of September 30, 2004."

Applicant has amended the paragraph beginning on page 14, line 26 and the paragraph beginning on page 18, line 16 to change "posterior surface 50" to recite --anterior surface 50-- to be consistent with the drawings.

Applicant has amended the paragraph beginning on page 17, line 8 to change "radial notches 102" to --radial notches 101--. Applicant has also amended FIG. 12 so that the reference character "101" labels the radial notches to be consistent with the amended specification at page 17, line 9.

Applicant has amended the paragraph beginning on page 15, line 24 to change "legs 42 and 44" to recite --legs 44 and 46-- to be consistent with the drawings.

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Applicant has amended FIG. 15B to include the reference character "112" for the shallow arcuate annular recess to be consistent with the specification at page 18, lines 21-22.

Applicant has amended FIGS. 15A, 15C, and 15D to remove the reference characters "101a," "101c," and "101d," respectively.

Applicant submits that these amendments to the specification and to the drawings do not add new matter to the present application. Applicant respectfully requests that the Examiner withdraw the objection to the drawings.

Response to Rejection of Claim 10 under 35 U.S.C. § 101

In the September 30, 2004 Office Action, the Examiner rejects Claim 10 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. As described herein, Applicant has amended Claim 10 by replacing the term "implanted" with the term --implantable--. Applicant submits that amended Claim 10 is directed to statutory subject matter and Applicant respectfully requests that the Examiner withdraw the rejection of Claim 10 and pass Claim 10 to allowance.

Response to Rejection of Claims 1-6, 10-12, 16-19, and 28-35 Under 35 U.S.C. § 102(b)

In the September-30, 2004 Office Action, the Examiner rejects Claims 1-6, 10-12, 16-19, and 28-35 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,607,472 issued to Thompson ("Thompson").

Claims 29 and 30

As described herein, Applicant has amended Claim 29 to recite (emphasis added):

29. An accommodating intraocular lens system comprising:
a lens having an elastically deformable curved surface; and
an elongate elastic member having a first portion and a second portion, the second portion at least partially overlapping the first portion, the elongate elastic member extending at least partially around a circumference of the lens, the elongate elastic member coupled to the lens and configured, upon implantation, to respond to action of a ciliary muscle of the eye by acting on the circumference of the lens to elastically change the curvature of the curved surface of the lens.

Support for this amendment is found in the present application as filed, including, but not limited to, Figures 7, 8, and 9.

Applicant submits that Thompson does not disclose an accommodating intraocular lens system as recited by amended Claim 29. In particular, Thompson does not disclose "an elongate elastic member having a first portion and a second portion, the second portion at least partially

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overlapping the first portion,” as recited by amended Claim 29. Therefore, Applicant submits that amended Claim 29 is patentably distinguished over Thompson.

Claim 30 depends from amended Claim 29, so Claim 30 includes all the limitations of amended Claim 29, as well as other limitations of particular utility. Therefore, Applicant submits that Claim 30 is patentably distinguished over Thompson. Applicant respectfully requests that the Examiner withdraw the rejection of Claims 29 and 30 and pass Claims 29 and 30 to allowance.

Claims 1-6, 10-12, and 16-19

Claim 1 recites (emphasis added):

1. An accommodating intraocular lens for implanting in an individual's eye, which comprises:

a deformable elastic dynamic lens having a surface curvature;

a lens-shaping member having flexible portions in contact with said dynamic lens for enabling deformation of said dynamic lens for changing said surface curvature;

an elastically flexible member in contact with said lens-shaping member flexible portions; and

first and second lens supporting members, said first lens supporting member having a proximal end region engaging said flexible member and a distal end region, said second lens supporting member having a proximal end region connected to said lens-shaping member and a distal end region, the distal end region of the first lens supporting member being configured upon implantation to engage a first region of said individual's eye that is responsive to contraction and relaxation of a ciliary muscle disposed in a ciliary body region of said individual's eye.

Applicant submits that Thompson does not disclose all the limitations of Claim 1. In particular, Thompson does not disclose an “elastically flexible member in contact with said lens-shaping member flexible portions,” a “first lens supporting member having a proximal end region engaging said flexible member,” or a “second lens supporting member having a proximal end region connected to said lens-shaping member” as recited by Claim 1.

Thompson discloses an intraocular lens (“IOL”) utilizing an expansion channel or a circular wire and sprocket in a flexible lens element to control the shape of the IOL. The Examiner states that Thompson discloses an elastically flexible member (i.e., the wire disclosed by Thompson at column 5, lines 35-37) in contact with the lens-shaping member flexible portions (i.e., the expansion channel 28 and the peripheral recessed ledge 36 disclosed by Thompson). However, at column 5, lines 34-39, Thompson discloses that (emphasis added):

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It is to be understood that means other than an expansion channel [28] may be used to achieve the non-accommodating shape such as, for example, a circular wire and sprocket. However, the expansion channel 28 is, in most cases, the preferred means for achieving the desired result.

Thus, Thompson discloses that the wire and the expansion channel are alternative structures, and does not disclose their use together as implied by the Examiner. Therefore, Thompson does not disclose "an elastically flexible member in contact with the lens-shaping member flexible portions," as recited by Claim 1 of the present application.

The Examiner further states that the layers 37, 38 disclosed by Thompson satisfy the limitations of the first lens supporting member as recited by Claim 1. However, Applicant submits that the layers 37, 38 disclosed by Thompson do not have "a proximal end region engaging said flexible member" as recited by Claim 1. As disclosed by Thompson at column 5, lines 40-55 and referring to FIG. 3A, layer 37 is on a peripheral recessed ledge 36 and layer 38 is on an underside of the flaps 34. These structures are used to engage the capsular bag, as disclosed by Thompson at column 6, lines 28-42, referring to FIG. 4, and Thompson does not disclose that these layers engage the wire cited by the Examiner. Thus, the layers 37, 38 do not satisfy all the limitations of the first lens supporting member as recited by Claim 1 of the present application. Therefore, Thompson does not disclose "a first lens supporting member having a proximal end region engaging the flexible member," as recited by Claim 1 of the present application.

The Examiner further states that the non-accommodating posterior member 24 disclosed by Thompson satisfies the limitations of the second lens supporting member as recited by Claim 1. However, Applicant submits that the posterior member 24 disclosed by Thompson does not have "a proximal end region connected to the lens-shaping member" as recited by Claim 1. The Examiner identifies the expansion channel 28 and the ledge 36 as satisfying the limitations of the lens-shaping member as recited by Claim 1 of the present application. As shown by FIG. 3A and FIG. 4 of Thompson, these structures are not connected to the posterior member 24. In fact, FIG. 3A and FIG. 4 show that these structures are spaced from the posterior member 24, since the anterior member 23 is only affixed to the posterior member 24 in a limited central area as disclosed by Thompson at column 5, lines 16-21, which allows the anterior member 23 of Thompson to expand and contract. Thus, the expansion channel 28 and the ledge 36 do not satisfy all the limitations of the second lens supporting member as recited by Claim 1 of the

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present application. Therefore, Thompson does not disclose “the second lens supporting member having a proximal end region connected to the lens-shaping member,” as recited by Claim 1 of the present application.

Applicant submits that Claim 1 is patentably distinguished over Thompson. Each of Claims 2-6 and 16-19 depends from Claim 1, Claim 10 depends from Claim 6, and each of Claims 11 and 12 depend from Claim 10. Therefore, each of Claims 2-6, 10-12, and 16-19 includes all the limitations of Claim 1, as well as other limitations of particular utility. Therefore, for the reasons stated above, Claims 2-6, 10-12, and 16-19 are also patentably distinguished over Thompson. Applicant respectfully requests that the Examiner withdraw the rejection of Claims 1-6, 10-12, and 16-19 and pass these claims to allowance.

Claim 28

Claim 28 recites (emphasis added):

28. An accommodating intraocular lens for implanting in an individual's eye, the lens comprising:

a dynamic lens having an elastically deformable curved surface;
a static haptic having a flexible portion in contact with the dynamic lens and configured to engage, upon implantation, a first region of the eye;
an elastic member in contact with the flexible portion of the static haptic; and

a dynamic haptic coupled to the elastic member and configured to engage, upon implantation, a second region of the eye responsive to contraction and relaxation of a ciliary muscle of the eye, whereby the dynamic haptic is configured, upon implantation, to deform in response to contraction and relaxation of the ciliary muscle, thereby deforming the elastic member and the flexible portion of the static haptic, and changing the curvature of the curved surface of the dynamic lens.

Applicant submits that Thompson does not disclose all the limitations of Claim 28. In particular, Thompson does not disclose “a static haptic,” “an elastic member in contact with the flexible portion of the static haptic,” “a dynamic haptic coupled to the elastic member,” or that “the dynamic haptic is configured ... to deform ... thereby deforming the elastic member and the flexible portion of the static haptic” as recited by Claim 28.

The Examiner states that the layers 37, 38 serve as the static haptic as recited by Claim 28. However, Applicant submits that because the layers 37, 38 are connected to the capsular bag, as disclosed by Thompson at column 6, lines 28-42, the layers 37, 38 move in response to movement of the capsular bag. Thus, the layers 37, 38 do not satisfy the limitation of a static

haptic as recited by Claim 28 of the present application. Therefore, Thompson does not disclose “a static haptic” as recited by Claim 28 of the present application.

The Examiner also states that Thompson discloses an elastic member (i.e., expansion channel 28 plus ledge 36, including wire or gel) in contact with the flexible portion of the static haptic (i.e., the layers 37, 38). However, as discussed above, Thompson discloses that the wire and the expansion channel are alternative structures, and does not disclose their use together as implied by the Examiner. In addition, Thompson does not disclose that the ledge 36 is in contact with the layer 38. At column 5, lines 49-54 of Thompson, the layer 37 is on the ledge 36 and the layer 38 is on the flap 34. As shown by FIG. 4 of Thompson, the capsular bag is sandwiched between the flaps 34 and the ledge 36, therefore the layer 38 is not in contact with the ledge 36. Thus, the layers 37, 38 do not satisfy all the limitations of the static haptic as recited by Claim 28 of the present application. Therefore, Thompson does not disclose “an elastic member in contact with the flexible portion of the static haptic” as recited by Claim 28 of the present application.

The Examiner also states that Thompson discloses a dynamic haptic (i.e., posterior portion 47) coupled to the elastic member (i.e., expansion channel 28 plus ledge 36, including wire or gel). However, Applicant submits that the posterior portion 47 disclosed by Thompson is not coupled to the expansion channel 28, the ledge 36, or the wire or gel as disclosed by Thompson. As shown by FIG. 5 of Thompson, the posterior portion 47 is spaced from these structures and is not coupled to these structures. Furthermore, the posterior portion 47 as disclosed by Thompson is not configured to deform the elastic member and the flexible portion of the static haptic, as recited by Claim 28. Thus, the posterior portion 47 does not satisfy all the limitations of the dynamic haptic as recited by Claim 28 of the present application. Therefore, Thompson does not disclose “a dynamic haptic coupled to the elastic member,” as recited by Claim 28 of the present application.

Applicant submits that Claim 28 is patentably distinguished over Thompson. Applicant respectfully requests that the Examiner withdraw the rejection of Claim 28 and pass Claim 28 to allowance.

Claims 31-35

Applicant has amended Claim 31 to recite (emphasis added):

31. An accommodating intraocular lens, comprising:
a lens having a deformable surface; and

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first and second members coupled together to transfer force from the ciliary muscle to the lens, said first member responsive to action of the ciliary muscle to apply a first force to said second member, said second member applying a second force which acts on the circumference of the lens in response to said first force such that both the circumference and the curvature of the lens change.

Applicant submits that Thompson does not disclose all the limitations of amended Claim 31 of the present application. In particular, Thompson does not disclose a “first member responsive to action of the ciliary muscle to apply a first force to said second member, said second member applying a second force which acts on the circumference of the lens in response to said first force such that both the circumference and the curvature of the lens change,” as recited by amended Claim 31 of the present application.

Applicant submits that Thompson does not disclose a second member applying a second force acting on the circumference of the lens. In addition, Thompson does not disclose that both the circumference and the curvature of the lens change upon application of the second force. Therefore, Applicant submits that Thompson does not disclose the “first and second members” as recited by amended Claim 31, so that amended Claim 31 is patentably distinguished over Thompson. Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 31 and pass amended Claim 31 to allowance.

Each of Claims 32-35 depends from amended Claim 31, so each of Claims 32-35 includes all the limitations of amended Claim 31, as well as other limitations of particular utility. Therefore, Applicant submits that each of Claims 32-35 is patentably distinguished over Thompson. Applicant respectfully requests that the Examiner withdraw the rejection of Claims 32-35 and pass Claims 32-35 to allowance.

Response to Rejection of Claims 1-5, 17-19, 28-29, and 31-34 Under 35 U.S.C. § 102(b)

In the September 30, 2004 Office Action, the Examiner rejects Claims 1-5, 17-19, 28-29, and 31-34 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,892,543 issued to Turley (“Turley”).

Claim 29

As described herein, Applicant has amended Claim 29. Applicant submits that Turley does not disclose an accommodating intraocular lens system having the “elongate elastic member extending at least partially around a circumference of the lens” as recited by amended Claim 29.

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Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 29 and pass amended Claim 29 to allowance.

Claims 1-5 and 17-19

Applicant submits that Turley does not disclose all the limitations of Claim 1. In particular, Turley does not disclose “a lens-shaping member having flexible portions in contact with said dynamic lens,” or a “distal end region of the first lens supporting member being configured upon implantation to engage a first region of said individual’s eye that is responsive to contraction and relaxation of a ciliary muscle disposed in a ciliary body region of the individual’s eye,” as recited by Claim 1 of the present application.

Turley discloses an IOL with a chamber containing a gas which functions as an optical element and which can be compressed to change shape and refractive power. The Examiner states that Turley discloses a lens-shaping member having flexible portions (i.e., the haptic arms 54 disclosed by Turley) in contact with the dynamic lens (i.e., thin pliable optical element 84 disclosed by Turley). However, as shown by Figs. 2, 4, and 6 of Turley, the haptic arms 54 do not contact the optical element 84. Thus, Turley does not disclose “a lens-shaping member having flexible portions in contact with said dynamic lens,” as recited by Claim 1 of the present application.

The Examiner further states that Turley discloses a first lens supporting member (i.e., rigid central element 60 disclosed by Turley) being configured upon implantation to engage a first region of said individual’s eye that is responsive to contraction and relaxation of the ciliary muscle. However, as shown by Figs. 2, 4, and 6 of Turley, the central element 60 does not engage a region of the individual’s eye. Thus, Turley does not disclose a “distal end region of the first lens supporting member being configured upon implantation to engage a first region of said individual’s eye that is responsive to contraction and relaxation of a ciliary muscle disposed in a ciliary body region of the individual’s eye,” as recited by Claim 1 of the present application.

Applicant submits that Claim 1 is patentably distinguished over Turley. Each of Claims 2-5 and 17-19 depends from Claim 1. Therefore, each of Claims 2-5 and 17-19 includes all the limitations of Claim 1, as well as other limitations of particular utility. Therefore, for the reasons stated above, Claims 2-5 and 17-19 are also patentably distinguished over Thompson. Applicant respectfully requests that the Examiner withdraw the rejection of Claims 1-5 and 17-19 and pass these claims to allowance.

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Claim 28

Applicant submits that Turley does not disclose all the limitations of Claim 28. In particular, Turley does not disclose “a static haptic having a flexible portion in contact with the dynamic lens,” or “a dynamic haptic ... configured, upon implantation, to deform in response to contraction and relaxation of the ciliary muscle, thereby deforming the elastic member and the flexible portion of the static haptic,” as recited by Claim 28.

The Examiner states that the haptic arms 54 serve as the static haptic and the optical element 84 serves as the dynamic lens, as recited by Claim 28. However, as shown by Figs. 2, 4, and 6 of Turley, the haptic arms 54 do not contact the optical element 84. Thus, Turley does not disclose “a static haptic having a flexible portion in contact with the dynamic lens,” as recited by Claim 1 of the present application.

The Examiner also states that Turley discloses a dynamic haptic (i.e., the optical element 84) which deforms the elastic member (i.e., tongue-and-groove connection 80 and outer circumferential edge or rim 82 as disclosed by Turley) and the flexible portion of the static haptic (i.e., the haptic arms 54). However, Applicant submits that the optical element 84 disclosed by Turley is not coupled to the connection 80, the rim 82, or the haptic arms 54 and is not configured to deform these structures. Thus, the optical element 84 does not satisfy all the limitations of the dynamic haptic as recited by Claim 28 of the present application. Therefore, Turley does not disclose “a dynamic haptic ... configured, upon implantation, to deform in response to contraction and relaxation of the ciliary muscle, thereby deforming the elastic member and the flexible portion of the static haptic,” as recited by Claim 28.

Applicant submits that Claim 28 is patentably distinguished over Turley. Applicant respectfully requests that the Examiner withdraw the rejection of Claim 28 and pass Claim 28 to allowance.

Claims 31-34

Applicant submits that Turley does not disclose all the limitations of amended Claim 31 of the present application. In particular, Turley does not disclose a “second member applying a second force which acts on the circumference of the lens in response to said first force such that both the circumference and the curvature of the lens change,” as recited by amended Claim 31 of the present application.

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As shown in Figs. 2 and 4 of Turley, the haptic fingers 70, 72 (identified by the Examiner as the first member of Claim 31) do not apply a force to the optical component 42 (identified by the Examiner as the second member of Claim 31) since the haptic fingers 70, 72 are not coupled to the optical component 42. In addition, the optical component 42 of Turley does not apply a second force which acts on the circumference of the lens such that both the circumference and the curvature of the lens change, as recited by amended Claim 31 of the present application. Therefore, Applicant submits that Turley does not disclose "first and second members" as recited by amended Claim 31, so that amended Claim 31 is patentably distinguished over Turley. Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 31 and pass amended Claim 31 to allowance.

Each of Claims 32-34 depends from amended Claim 31, so each of Claims 32-34 includes all the limitations of amended Claim 31, as well as other limitations of particular utility. Therefore, Applicant submits that each of Claims 32-34 is patentably distinguished over Turley. Applicant respectfully requests that the Examiner withdraw the rejection of Claims 32-34 and pass Claims 32-34 to allowance.

Response to Rejection of Claims 28-32 and 35 Under 35 U.S.C. § 102(b)

In the September 30, 2004 Office Action, the Examiner rejects Claims 28-32 and 35 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,120,538 issued to Rizzo, III et al. ("Rizzo").

Claims 29 and 30

As described herein, Applicant has amended Claim 29. Applicant submits that Rizzo does not disclose an accommodating intraocular lens system as recited by amended Claim 29. In particular, Rizzo does not disclose "an elongate elastic member" as recited by amended Claim 29.

As discussed at column 1, lines 39-44 of Rizzo, Rizzo discloses an IOL utilizing a band encircling a deformable lens and coupled to a micromotor which alters the tension of the band to alter the shape of the lens. Applicant submits that Rizzo does not disclose that the band 14 is elastic, as recited by amended Claim 29. Referring to FIG.1, Rizzo discloses at column 3, lines 12-17 that (emphasis added):

Surrounding a peripheral portion of the intra-ocular lens 12 is an encircling band 14. One end 16 of the band 14 is fixed in location and the other end 18 engages a micromotor 20. The micromotor 20 increases or decreases tension in the

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encircling band 14 to effect a change in the shape of the lens 12 thereby effecting a change in its dioptric power.

Applicant submits that Rizzo discloses that the micromotor 20 places the band 14 under tension (e.g., by pulling on one end while the second end is fixed), which does not require that the band 14 be elastic. Thus, Rizzo does not disclose that the band 14 is elastic, and the IOL disclosed by Rizzo does not require that the band 14 be elastic. Therefore, Rizzo does not disclose “an elongate elastic member,” as recited by amended Claim 29.

Furthermore, Applicant submits that the band 14 of Rizzo is not configured to respond to action of the ciliary muscle of the eye, as recited by amended Claim 28. At column 2, lines 65-67, Rizzo discloses that “[t]he degree of activation of the micromotor, for example, is governed by the estimated need for dioptric strength mandated by the distance measuring apparatus.” Therefore, the micromotor 20 and the band 14 of Rizzo do not respond to action of a ciliary muscle of the eye, as recited by amended Claim 29 of the present application.

Thus, Applicant submits that Rizzo does not disclose “an elongate elastic member,” as recited by amended Claim 29, and Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 29 and pass amended Claim 29 to allowance.

Claim 30 depends from amended Claim 29, so Claim 30 includes all the limitations of amended Claim 29, as well as other limitations of particular utility. Applicant respectfully requests that the Examiner withdraw the rejection of Claim 30 and pass Claim 30 to allowance.

Claim 28

Applicant submits that Rizzo does not disclose all the limitations of Claim 28. In particular, Rizzo does not disclose “an elastic member in contact with the flexible portion of the static haptic,” or “a dynamic haptic coupled to the elastic member ... whereby the dynamic haptic is configured, upon implantation, to deform in response to contraction and relaxation of the ciliary muscle,” as recited by Claim 28 of the present application.

The Examiner states that Rizzo discloses an elastic member (i.e., the band 14) in contact with the flexible portion of the static haptic (i.e., haptic 26 to the right of FIG. 1 of Rizzo). However, as discussed above, Rizzo does not disclose that the band 14 is elastic. Furthermore, as shown by FIG. 1 of Rizzo, the band 14 is not in contact with the haptic 26, and Rizzo does not disclose that the band 14 is in contact with the haptic 26. Therefore, Rizzo does not disclose “an elastic member in contact with the flexible portion of the static haptic,” as recited by Claim 28.

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The Examiner further states that the dynamic haptic (i.e., haptic 26 to the left of FIG. 1 of Rizzo) is configured, upon implantation, to deform in response to contraction and relaxation of the ciliary muscle, thereby deforming the elastic member (i.e., band 14) and the flexible portion of the static haptic (i.e., haptic 26 to the right of FIG. 1 of Rizzo). However, Applicant submits that Rizzo does not disclose that the haptic 26 itself deforms, or that the haptic 26 deforms the band 14 or the other haptic 26. Therefore, Rizzo does not disclose “a dynamic haptic coupled to the elastic member ... whereby the dynamic haptic is configured, upon implantation, to deform in response to contraction and relaxation of the ciliary muscle,” as recited by Claim 28 of the present application.

Applicant submits that Claim 28 is patentably distinguished over Rizzo. Applicant respectfully requests that the Examiner withdraw the rejection of Claim 28 and pass Claim 28 to allowance.

Claims 31, 32, and 35

Applicant submits that Rizzo does not disclose that the band 14 (identified by the Examiner as the second member of Claim 31) is in contact with the haptic 26 (identified by the Examiner as an alternative first member of Claim 31), so the haptic 26 does not apply a force to the band 14. In addition, Rizzo does not disclose that the micrometer 20 (identified by the Examiner as an alternative first member of Claim 31) operates in response to action of the ciliary muscle to apply compression to the band 14. Instead, Rizzo discloses at column 2, lines 65-67 that the “degree of activation of the micrometer ... is governed by the estimated need for dioptric strength mandated by the distance measuring apparatus.” Therefore, Rizzo does not disclose “first and second members,” as recited by amended Claim 31. Applicant submits that amended Claim 31 is patentably distinguished over Rizzo and Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 31 and pass amended Claim 31 to allowance.

Each of Claims 32 and 35 depends from amended Claim 31, so each of Claims 32 and 35 includes all the limitations of amended Claim 31 as well as other limitations of particular utility. Therefore, Applicant submits that Claims 32 and 35 are patentably distinguished over Rizzo, and Applicant respectfully requests that the Examiner withdraw the rejection of Claims 32 and 35 and pass Claims 32 and 35 to allowance.

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Response to Rejection of Claims 29-35 Under 35 U.S.C. § 102(b)

In the September 30, 2004 Office Action, the Examiner rejects Claims 29-35 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,932,966 issued to Christie et al. ("Christie").

Claims 29 and 30

Christie discloses an IOL which uses flexible bladders filled with liquid which expand or contract in response to the ciliary body. As disclosed by Christie at column 4, lines 40-50, contraction of the ciliary body compresses the bladders, thereby sending the fluid to a chamber in contact with a deformable lens surface. The chamber expands in response to the fluid, thereby changing the curvature of the lens surface.

As described herein, Applicant has amended Claim 29. Applicant submits that Christie does not disclose an accommodating intraocular lens system as recited by amended Claim 29. In particular, Christie does not disclose "an elongate elastic member" as recited by amended Claim 29.

Applicant submits that Christie does not disclose that the springs shown by Fig. 11 of Christie (i.e., the coil spring 110 or the leaf spring 112) extend at least partially around a circumference of the lens or "respond to action of a ciliary muscle of the eye by acting on the circumference of the lens to elastically change the curvature of the curved surface of the lens," as recited by amended Claim 29. As disclosed by Christie at column 5, lines 50-62, these springs are used to overcome the viscous fluid forces of the fluid by expanding the bladders. Christie also does not disclose that the springs are coupled to the lens, or that the coil spring 110 or the leaf spring 112 changes the curvature of the curved surface. Therefore, Christie does not disclose "an elongate elastic member," as recited by amended Claim 29. Thus, Applicant submits that amended Claim 29 is patentably distinguished over Christie, and Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 29 and pass amended Claim 29 to allowance.

Claim 30 depends from amended Claim 29, so Claim 30 includes all the limitations of amended Claim 29, as well as other limitations of particular utility. Applicant respectfully requests that the Examiner withdraw the rejection of Claim 30 and pass Claim 30 to allowance.

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Claims 31-35

Applicant submits that the coil spring 110 of Christie does not apply a force which acts on the circumference of the lens such that the circumference of the lens change, as recited by amended Claim 31. In addition, as discussed above in relation to amended Claim 29, Applicant submits that the coil spring 110 does not apply a force to the lens such that the curvature of the lens changes. Therefore, Applicant submits that Christie does not disclose "first and second members" as recited by amended Claim 31, so that amended Claim 31 is patentably distinguished over Christie. Applicant respectfully requests that the Examiner withdraw the rejection of amended Claim 31 and pass amended Claim 31 to allowance.

Each of Claims 32-35 depends from amended Claim 31, so each of Claims 32-35 includes all the limitations of amended Claim 31 as well as other limitations of particular utility. Therefore, Applicant submits that Claims 32-35 are patentably distinguished over Christie, and Applicant respectfully requests that the Examiner withdraw the rejection of Claims 32-35 and pass Claims 32-35 to allowance.

Summary

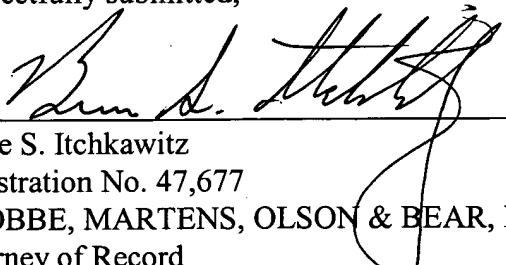
For the foregoing reasons, Applicant submits that Claims 1-19, 28-30, and 31-35 are in condition for allowance, and Applicant respectfully requests such action.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

Dated: 1/28/05

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AMENDMENTS TO THE DRAWINGS

In the September 30, 2004 Office Action, the Examiner objects to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(4) and (p)(5). As described herein, Applicant has either amended the specification or the drawings to address the issues identified by the Examiner. The amended drawings are submitted herewith as replacement sheets which are labeled "Replacement Sheet Reply to Office Action of September 30, 2004."

Applicant has amended FIG. 12 so that the reference character "101" labels the radial notches to be consistent with the amended specification at page 17, line 9.

Applicant has amended FIG. 15B to include the reference character "112" for the shallow arcuate annular recess to be consistent with the specification at page 18, lines 21-22.

Applicant has amended FIGS. 15A, 15C, and 15D to remove the reference characters "101a," "101c," and "101d," respectively.